IN THE APPLICATION

OF

Robert L. Jensen

FOR

Portable Planer for a Single Use Stand

FILED WITH

THE UNITED STATES PATENT AND TRADEMARK OFFICE

-,1 ₃

EXPRESS MAIL MAILING CERTIFICATE
Express Mail mailing laber number: EE 353 877.481 US
Date of Deposit 23 February 2004
I hereby certify that this paper or fee is being deposited with
the United States Postil Service Express Hall East Office to
Addressee under 37 CFR.1.90 on the date indicated above and is
addressed to "Mail Stor Payent Epplications, formissioner
for Patents, P.O. Box 1459; Alexandria, Virginia 22313-1450"

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates generally to planers and, more specifically, to a portable planer

having rails with means for mounting to a single use stand. The planer has a pair of rails with posts

depending from the base having threads positioned on the distal ends whereby a stand having been

constructed on site and leveled regardless of ground slope has means for receiving the threaded posts

whereupon fasteners may be placed on the rail post distal ends thereby the rails form an integral part

of said single use stand. The motorized planer is mounted to a carriage having wheels for mounting

on said rails whereby the planer can be selectively moved from one rail end to the other. Positioned

between the single use rail mounts are supports for placing the work piece for processing with the

planer having means for receiving various blades and means for varying the height of the blade

relative to the work piece.

The device is designed to manufacture several wood products to include; three sided or "D"

shaped logs used in the construction of log buildings, for planing timbers for use in construction of

timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings

or to custom make to size (height and width) timbers or logs for general construction use.

. .d

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-2-

Description of the Prior Art

There are other planer devices designed for shaping a work piece. Typical of these is U.S. Patent No. 1,583,879 issued to Hallock on May 11, 1926.

Another patent was issued to Bassett on February 3, 1976 as U.S. Patent No. 3,935,777. Yet another U.S. Patent No. 4,265,284 was issued to Taylor on May 5, 1981 and still yet another was issued on April 28, 1987 to Elsey as U.S. Patent No. 4,660,454.

Another patent was issued to Schuler on April 4, 1989 as U.S. Patent No. 4,817,693. Yet another U.S. Patent No. 5,201,351 was issued to Hurdle, Jr. on April 13, 1993. Another was issued to Cannaday on March 14, 1995 as U.S. Patent No. 5,396,938 and still yet another was issued on June 27, 2000 to Greenland as U.S. Patent No. 6,080,041.

Another patent was issued to Olson on August 22, 2000 as U.S. Patent No. 6,105,477. Yet another German Patent No. DE4212460 was issued to Buck et al on October 21, 1993. Another was issued to Lavis on May 2, 1984 as U.K. Patent No. GB2128546.

<u>U.S. Patent Number 1,583,879</u>

Inventor: William I. Hallock

Issued: May 11, 1926

A planer having a table, means forming an inclined surface upon the under side of said table,

a slidable wedge engaging said inclined surface, means for sliding said wedge to raise and lower said

table, an auxiliary table detachably secured to said table, means forming inclined surfaces upon the

under side of said auxiliary table, means engaging said inclined surface and supporting said auxiliary

table, and means for actuating said means so as to raise and lower said auxiliary table.

ary

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

<u>U.S. Patent Number 3,935,777</u>

Inventor: Alvin L. Bassett

ury

in the state of th

 $\cdot \cdot a$

Issued: February 3, 1976

A portable cutting device is provided which comprises a table having first and second frame sections maintained in parallel spaced apart relationship by a plurality of attaching members extending between said first frame section and said second frame section, each of said first and said

second frame sections having a longitudinally extending assembly mounted along an upper edge

thereof, said longitudinal assemblies having a plurality of spaced apart transverse assemblies

mounted thereon and extending substantially perpendicularly therebetween; guide means having a

length sufficient to traverse a diagonal of said table and having sufficient rigidity to resist bending

under stress and cutting means coacting with said guide to permit said cutting means to transverse a

substantial portion of the length of said guide.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-5-

U.S. Patent Number 4,265,284

Inventor: George O. Taylor

Issued: May 5, 1981

A workbench comprises a rigid frame support having telescoped legs to provide adjustable

working height and supporting a flat topped work surface. The frame has two widely spaced apart

parallel guide rods extending from one side of the work surface, the guide rods having slideable

thereon a clamping member to clamp a tool against the adjacent side of the work surface.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-6-

<u>U.S. Patent Number 4,660,454</u>

Inventor: Paul Elsey

Issued: April 28, 1987

A portable bandsaw mill, readily made sufficiently light in weight to be carried by two

people, having a saw unit supported on rollers, so that the saw unit can be readily guided and the cut

controlled and adjusted manually. A ground-supported support frame or unit provides guide tracks

spaced apart on opposite sides of a log or other work piece, on which the saw unit can be rollingly

advanced. The ends of the guide tracks are supported in end frames by structure enabling the levels

of the guide tracks to be conveniently adjusted for successively lower passes of the saw unit through

the log. Guide beam ends are capable of independent adjustment to accommodate differences in

level between the four corners of the support unit. A manually advanced rolling saw head of the saw

unit includes two bandsaw pulleys, each having a bandsaw blade entrained thereon, one being an

idler pulley and the other a drive pulley. The drive pulley, rotatably driven, can be powered by a

hydraulic motor, with the actual pressure fluid source separate from the mill. The motor can be

readily separable from the saw unit for use in powering other apparatus. The mill can be readily

employed for rip sawing logs into boards at any convenient location for example the felling site.

318

.,;.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-7-

<u>U.S. Patent Number 4,817,693</u>

Inventor: Michael J. Schuler

Issued: April 4, 1989

An extension table for a machine tool of the type that includes a machine table that defines a

reference plane includes a rigid, straight beam having a lower surface. A ledge is mounted to the

lower surface of an outer portion of the beam to extend outwardly from at least one side of the beam,

and this ledge defines a continuous upper surface which is substantially coplanar with the lower

surface of the beam. The inner portion of the beam is mounted on the machine table with the beam

positioned above the machine table such that the outer portion of the beam is cantilevered from the

machine table with the lower surface of the beam substantially coplanar with the machine table. The

outer portion of the beam is then supported against deflection by a support leg. The beam is

sufficiently rigid to ensure that the upper surface of the ledge is substantially coplanar with the

machine table. In certain applications the beam is preferably divided into two or more separate beam

sections which are held together releasably by coupling elements. A center of one of the beam

sections may be affixed to a conventional guide fence of the machine tool to move the extension

table laterally across the machine table with the guide fence.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

.

.

-8-

<u>U.S. Patent Number 5,201,351</u>

Inventor: Ennis J. Hurdle, Jr.

Issued: April 13, 1993

An edger for use with a conventional sawmill, including upper and lower chippers or cutters

for forming the upper and lower edges of a board to be removed from a log, mechanical or optical

sizers for automatically determining the location of the upper and lower edges of the board, and a

control mechanism, responsive to the sizers, for positioning the cutters. The cutters have horizontal

or vertical motors with associated blades, and the motors are mounted on carriages which ride up and

down on a mast, positioned by a hydraulic cylinder. Mechanical sizing wheels are mounted on

separate carriages, and the wheels are urged to contact the log's surface to determine extreme points

of narrowness thereof. The extreme motion points of the sizing wheels are recorded by frictionally

secured pistons which are sensed by metallic sensors which are input to the control mechanism. An

electric eye causes the sizing wheels to move toward and away from the log. During each forward

pass of the log toward the saw, the cutters cut the top and bottom edges off the board that the saw

will remove from the log, while the sizers profile the log or locate the minimum width points to be

used during the succeeding pass of the log to position the cutters. The single channel or double "H-

beam" mast has machined sidewalls to which flanges are attached upon which the carriages slide

vertically. Linear slide bearings can also attach the carriages to the mast.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

<u>U.S. Patent Number 5,396,938</u>

Inventor: Ray L. Cannaday

Issued: March 14, 1995

Apparatus and method for, in one continuous operation, receiving a slab sawn from a log,

sensing the thickness of the slab and setting the apparatus to plane its upper and lower surfaces to

produce a desired thickness slab which then is sawn into boards of desired width. The apparatus

includes upper and lower planer heads, the upper of which is mounted on adjustable setworks for

raising and lowering. At the infeed end of the apparatus a sensor determines the thickness of an

entering slab and through control mechanism adjusts the space between the planer heads to plane the

slab to a desired common board thickness which is the maximum available from the slab size. A

bank of smooth cutting saws downstream from the planer heads saws the slab into smooth-sided

boards.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-10-

<u>U.S. Patent Number 6,080,041</u>

Inventor: Darrell Greenland

Issued: June 27, 2000

A saw with a compact frame that permits the cutting of large workpieces and that can be

repeatedly operated repeatedly without requiring manual activation of an on/off switch. A special

pivoting support arm pivots outwardly away from a motor assembly to allow the cutting of large

workpieces while allowing the size of the saw to remain relatively compact and portable. An

automatic power switch mechanism also is provided to automatically turn on the saw motor upon the

placement of a work piece adjacent to the saw blade. The saw table can be slid beyond the frame for

the cutting of large workpieces.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-11-

<u>U.S. Patent Number 6,105,477</u>

Inventor: Garry O. Olson

Issued: August 22, 2000

A portable sawmill is described that preferably includes a frame-mounted, elongate tub for

surrounding a log, the frame mounting adjacent the base of the tub a lateral chain conveyor for

rolling the log or advancing it laterally on a frame-mounted lift mechanism for elevating the log as it

is ripped by an overhead set of circular saws. The circular saws are double-carriage mounted, with

the carriages being a fixed elevation on the frame and with the main and secondary carriages being

reciprocally positionable, respectively, along the length and width of the tub above the log. The

circular saws preferably include one vertical-swath blade and two vertically separately elevation-

adjustable horizontal-swath blades. To one side of the tub, and along the substantial length of the

frame, are a plurality of retractable support arms mounted on the frame at a height approximately

equal to the elevation of the lateral conveyor at the highest elevation of the lift mechanism. Logs

may be lifted as they are processed, and cants produced by such processing may be lifted and moved

laterally onto the support arms for further milling. The support arms are automatically retracted from

a maximum inward extent to an incrementally, successively retracted position synchronously with

lateral movement of the secondary carriage, at the beginning of each of successive passes of the main

carriage, to prevent interference between the saw blades and the inward termini of the retractable

arms. Structure for spindle-aligning logs, rotating partly squared logs and handling cants while

finish milling lumber is described.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-12-

German Patent Number DE4212460

Inventor: Dipling M. Buck et al.

20

Issued: October 21, 1993

The invention discloses a guide rail for hand operated circular saw having a raise rib along

which base plate of saw can slide and side clamps to fit over edge of timber. The guide rail is laid on

the timber to be cut and its side clamp is pressed against the edge of the timber. The clamp is bolted

to the rail by means of a bolt whose head is captive in the hollow underside of the raised rib. The

circular saw is mounted on a base plate which has a groove in its underside to fit over the rib and

enable the saw to slide and cut along a scribed line parallel to the rib. The end of the clamp acts as a

gauge for the rail and sets it along the scribed line.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

-13-

U.K. Patent Number GB2128546

Inventor: Joseph L. Lavis

Issued: May 02, 1984

A power tool mounting assembly which comprises a semi-circular base plate which has a

radial arm pivotally connected adjacent the straight edge to the underside of the plate. The arm has a

yoke member slidably mounted thereon. A power tool support arm is slidably supported in a

crosshead which is pivotally supported in the yoke. The support arm can comprise two parallel,

spaced limbs connected to transverse members with one limb being supported in the cross-head.

Alternatively, the support arm can comprise a channel member with two parallel, spaced carriage

housings fixed thereto for movably supporting the carriage housing on rails fixed to the cross-head.

A power tool is detachably supported by the support arm which extends across the base plate above

the radial arm. The support arm and power tool can be counter balanced by weights or springs.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

ويدن

-14-

While these work stands may be suitable for the purposes for which they were designed, they would not be as suitable for the purposes of the present invention, as hereinafter described.

SUMMARY OF THE PRESENT INVENTION

The present invention discloses a portable planer having rails with means for mounting to a single use stand. The planer has a pair of rails with bolts depending from the base thereof having threads with nuts positioned on the distal ends whereby a stand having been constructed on site and leveled regardless of ground slope has means for receiving the threaded bolts whereupon fasteners may be placed on the rail post distal ends whereby the rails form an integral part of the single use stand. The motorized planer is mounted to a carriage having wheels for mounting on the rails whereby the planer can be selectively moved from one rail end to the other. Positioned between the single use rail mounts are supports for placing the work piece thereon for processing with the planer having means for receiving various blades and means for varying the height of the blade relative to the work piece.

A primary object of the present invention is to provide a gas motorized planer that can be used with a single use stand.

Another object of the present invention is to provide a gas motorized planer mounted to a carriage.

Yet another object of the present invention is to provide a gas motorized planer mounted to a carriage having means for receiving various blade types.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

41.00

Still yet another object of the present invention is to provide a gas motorized planer having means for varying the blade height relative to a work piece.

Another object of the present invention is to provide a gas motorized planer having a pair of rails for mounting said planer carriage.

Yet another object of the present invention is to provide a portable gas motorized planer having a pair of rails wherein said rails have posts depending therefrom.

Still yet another object of the present invention is to provide portable gas motorized planer having a pair of rails with a plurality of rail posts extending therefrom wherein said posts have threads positioned on the distal ends for mounting fasteners thereto.

Another object of the present invention is to provide a portable gas motorized planer which does not require electric power to operate.

Yet another object of the present invention is to provide a portable gas motorized planer for use where electric power is not available, as in remote locations.

Additional objects of the present invention will appear as the description proceeds.

The present invention overcomes the shortcomings of the prior art by providing a portable planer Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

having rails with means for mounting to a single use stand. The planer has a pair of rails with posts depending from the base having threads positioned on the distal ends whereby a stand having been constructed on site and leveled regardless of ground slope has means for receiving said threaded posts whereupon fasteners may be placed on the rail post distal ends thereby said rails form an integral part of said single use stand. The motorized planer is mounted to a carriage having wheels for mounting on said rails whereby said planer can be selectively moved from one rail end to the other. Positioned between the single use rail mounts are supports for placing the work piece during shaping with the planer having means for receiving various blades and means for varying the height of the blade relative to the work piece.

Additionally, the device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use.

The foregoing and other objects and advantages will appear from the description to follow.

In the description reference is made to the accompanying drawings, which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced.

These embodiments will be described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that structural changes may be made without departing from the scope of the invention. In the accompanying Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

drawings, like reference characters designate the same or similar parts throughout the several views.

The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is best defined by the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

In order that the invention may be more fully understood, it will now be described, by way of example, with reference to the accompanying drawings in which:

Figure 1 is an illustrative view of the present invention in use.

Figure 2 is a perspective view of the present invention.

Figure 3 is a perspective view of the present invention.

Figure 4 is a perspective view of the present invention.

Figure 5 is a side view of the present invention.

Figure 6 is a side detailed view of the present invention.

Figure 7 is an end view of the present invention.

Figure 8 is a top view of the present invention.

Figure 9 is a side view of the present invention.

Ly of

111

Figure 10 is a sectional view of the present invention.

Figure 11 is a view of one type of planer blade that can be used with the present invention

Figure 12 is a view of another type of planer blade that can be used with the present invention

Figure 13 is a side view of a planer blade of the present invention in its lowest setting.

Figure 14 is a side view of a planer blade of the present invention in its highest setting.

Figure 15 is a front view of a planer blade and adjustment system of the present invention.

ntion

LIST OF REFERENCE NUMERALS

With regard to reference numerals used, the following numbering is used throughout the drawings.

10	present invention
12	planer
14	rail
16	horizontal rail support
18	vertical rail support
20	end stop
22	braces
24	nailer
26	work material rest
28	cap nailer
30	planer head safety cover
32	pulley safety cover
34	cover hinge
36	height adjuster
38	push handle
40	carriage

42

wheels

Jag

- 44 gas motor
- 46 pulley
- 48 post
- 50 nut
- 52 shims
- 54 rail connector
- 56 planer blade
- 58 planer blade
- 60 planer head
- 62 lowest position
- 64 highest position
- 66 user

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The following discussion describes in detail one embodiment of the invention. This discussion should not be construed, however, as limiting the invention to those particular embodiments since practitioners skilled in the art will recognize numerous other embodiments as well. For a definition of the complete scope of the invention, the reader is directed to the appended claims.

Turning to Figure 1, shown therein is an illustrative view of the present invention 10 in use.

The present invention 10 discloses a portable, manually operable planer 12 showing user 66 grasping handle 38, the planer having means for attaching rails 14 to rail supports 16,18 or guides and comprising a carriage, having a safety cover and riding on the rails with means for adjusting the height of the cutting blade. The device 10 is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use.

Turning to Figure 2, shown therein is a perspective view of the present invention 10. Shown is the rail 14 and rail support system of the present invention 10 comprising a portable, manually operable planer having means for attaching rails 14 to horizontal 16 and vertical 18 rail supports or guides and comprising a carriage, having a safety cover and riding on the rails with means for Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

adjusting the height of the cutting blade. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are rail end stop 20, braces 22, nailers 24, work piece or material rest 26, and cap nailer 28.

Turning to Figure 3, shown therein is a perspective view of the present invention 10. Shown is the present invention 10 comprising a portable, manually operable planer 12 having means for attaching rails 14 to rail supports or guides 16, 18 and comprising a carriage, having a planer head safety cover 30 and a pulley system also having a safety cover 32 and riding on the rails with means for adjusting the height of the cutting blade. The device 10 is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are end stop 20, braces 22, nailers 24, work material rest 26, and cap nailer 28.

Turning to Figure 4, shown therein is a perspective view of the present invention 10. Shown is the present invention 10 comprising a portable, manually operable planer 12 having means for attaching rails 14 to rail supports or guides 16, 18 and comprising a carriage, having a safety cover 30 with cover hinge 34 and riding on the rails with means for adjusting 36 the height of the cutting Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

blade. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are push handle 38 and pulley cover 32. Also shown are end stop 20, braces 22, nailers 24, work material rest 26, and cap nailer 28.

Turning to Figure 5, shown therein is a side view of the present invention 10. Shown is the present invention 10 comprising a portable, manually operable planer 12 having means for attaching rails 14 to rail supports or guides 16, 18 and comprising a carriage 40 with wheels 42, having a safety cover 30 with hinge 34 and riding on the rails with means for adjusting 36 the height of the cutting blade. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are gas motor 44, pulley 46, bolt 48, nut 50 and shims 52. Also shown are end stop 20, nailers 24, work material rest 26, and cap nailer 28.

Turning to Figure 6, shown therein is a side detailed view of the present invention 10.

Shown is the present invention 10 comprising a portable, manually operable planer 12 having means for attaching rails 14 to rail supports 16, 18 or guides and comprising a carriage 40 with wheels 42, having a safety cover 30 and riding on the rails with means for adjusting 36 the height of the cutting Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

blade. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are gas motor 44, pulley 46, bolt 48, nut 50, and shims 52. Also shown are end stop 20, nailers 24, work material rest 26, and cap nailer 28.

Turning to Figure 7, shown therein is an end view of the present invention 10. Shown is the present invention 10 comprising a portable, manually operable planer having means for attaching rails 14 to rail supports 16, 18 or guides and comprising a carriage, having a safety cover and riding on the rails with means for adjusting the height of the cutting blade. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are shims 52, bolt 48 and nut 50. Also shown are end stop 20, braces 22, nailers 24, work material rest 26, and cap nailer 28.

Turning to Figure 8, shown therein is a top view of the present invention 10. Shown is a top view of the present invention 10 comprising a portable, manually operable planer having means for attaching rails 14 with rail connectors 54 to rail supports 16 or guides and comprising a carriage, having a safety cover and riding on the rails with means for adjusting the height of the cutting blade.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are end stop 20, braces 22, nailers 24, work material rest 26, and cap nailer 28.

Turning to Figure 9, shown therein is a side view of the present invention 10. Shown is a side view of the present invention 10 comprising a portable, manually operable planer 12 with gas motor 44 and pulley 46 having means for attaching rails to rail supports or guides and comprising a carriage 40 with wheels 42, having a safety cover 30 and riding on the rails with means for adjusting the height 36 of the cutting blade. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use.

Turning to Figure 10, shown therein is a sectional view of the present invention 10. Shown is a sectional view of the rail 14 and rail support 16. A bolt or post 48 is welded to the under side of the rail 14 and is secured to the rail support 16 by a nut 50. Washers or shims 52 are added between the rail 14 and rail support 16 to adjust the height by adding or removing the washers or shims.

Turning to Figure 11, shown therein is a view of one type of planer blade 56 that can be used

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

with the present invention. Shown is a planer blade 56 of the present invention having a flat surface knife blade.

Turning to Figure 12, shown therein is a view of another type of planer blade 58 that can be used with the present invention. Shown is a planer blade 58 of the present invention having a curved blade for forming a concave surface that when used in conjunction with a straight blade can form lumber having a substantially "D" shape in cross section.

√ià.

W

Turning to Figure 13, shown therein is a side view of the planer assembly in its lowest setting. Shown is the present invention 10 comprised of a plane 12 mounted on rails fastened to a stand having means for adjusting the planer head or blade 60 relative to the work piece. The plane 12 has a gas powered engine 44 mounted on a carriage in communication with a cutting head 60 by means of a pulley 46 and belt. The stand can be constructed on site to suit the type of timbers or lumber desired. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are planer cover 30, height adjuster 36 showing the lowest position of the planer head at 62.

Turning to Figure 14, shown therein is a side view of a planer blade 60 of the present invention in its highest setting at 64. Shown is the present invention comprised of a plane 12

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004

mounted on rails fastened to a stand having means for adjusting the blade 60 relative to the work piece. The plane 12 has a gas powered engine 44 mounted on a carriage in communication with a cutting head by means of a belt. The stand can be constructed on site to suit the type of timbers or lumber desired. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are planer cover 30, height adjuster 36 showing the highest position of the planer head at 64.

Turning to Figure 15, shown therein is a front view of a planer blade 60 and adjustment system of the present invention. Shown is the present invention comprised of a plane mounted on rails 14 fastened to a stand having means for adjusting the blade relative to the work piece. The plane has a gas powered engine mounted on a carriage 40 with wheels 42 in communication with a cutting head 60 by means of a belt. The stand can be constructed on site to suit the type of timbers or lumber desired. The device is designed to manufacture several wood products to include; three sided or "D" shaped logs used in the construction of log buildings, for planing timbers for use in construction of timber frame buildings, for shaping or profiling natural logs for construction of natural log buildings or to custom make to size (height and width) timbers or logs for general construction use. Also shown are planer cover 30, height adjuster 36 and pulley 46.

Jensen; Doc. No. RJ-1-gw; 9 Jan. 2004